



**National Diabetes Education Program  
Guiding Principles for Diabetes Care  
for Health Care Providers and  
People with Diabetes**

## ***National Diabetes Education Program Guiding Principles for Diabetes Care***

The National Diabetes Education Program (NDEP) has developed the *Guiding Principles for Diabetes Care* for health care providers and people with diabetes and their families. These guiding principles outline the seven essential components of quality diabetes care and treatment. These principles can be used by managed care and employer organizations to determine diabetes care and treatment service options in health plans, assess quality, and establish diabetes care principles. These principles form the basis of NDEP's public and professional awareness programs.

People with diabetes, their families, and caregivers can also use the guiding principles to make informed decisions about their diabetes care. The NDEP believes that people with diabetes and their families should be encouraged to participate in any decisions regarding care with their health care providers.

This booklet contains two versions of the guiding principles – a version for health care providers and a version for people with diabetes and their families. The NDEP encourages health care providers and people with diabetes to use these principles as a guide for discussing diabetes treatment and management. The specific treatment plan for each person with diabetes is left up to the health care provider and his or her patient.

The NDEP hopes the *Guiding Principles for Diabetes Care* will help both health care providers and people with diabetes to manage the disease most effectively and promote a long and active life for people and their family members living with this disease.

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***National Diabetes Education Program (NDEP)***  
***Guiding Principles for Diabetes Care:***  
***For Health Care Providers***

**Introduction**

The goal of the National Diabetes Education Program (NDEP) is to reduce the suffering and death resulting from diabetes and its complications, through programs which increase public and health professional awareness of the seriousness of diabetes and the value of its treatment. These Principles of Diabetes Care describe the essential components of quality diabetes treatment and form the basis of NDEP's public and professional awareness programs. The principles have been developed for people with diabetes, their families, health care providers, as well as those who pay for health care, to define the information and care needed to assure quality diabetes care.

People with diabetes and health care professionals should be in an on-going conversation about what care is best for each individual, and why. To encourage these conversations, the Principles for Diabetes Care outline essential elements of quality treatment, leaving specifics up to the individuals with diabetes, their families, and health care providers. These principles are based upon current research, guidelines, and standards of care.

Persons with diabetes should be encouraged to participate in all aspects of a full and active life, with decisions regarding any limitations being made on an individual basis between a person and his or her health care provider. Proper care and continued management of diabetes can prevent or control diabetes complications. With proper education and careful self-monitoring, people with diabetes should expect to lead long and active lives at work, home, and during leisure time.

**Principle 1: Screening High Risk People and Diagnosing Diabetes**

*One third of people with diabetes remain undiagnosed. Finding and treating diabetes early can improve health outcomes for people with diabetes. Therefore, routine screening and correct diagnosis are essential.*

Fasting plasma glucose should be measured periodically as part of routine health screening, particularly in people at high risk for diabetes. High-risk individuals include those who are older, overweight, have a family history of diabetes, have had gestational diabetes, and are of certain ethnic backgrounds. Early identification of diabetes may lessen or prevent the all-too-frequent problem of long-term complications developing before the person has been diagnosed. The diagnosis of diabetes should be clear, based on

accepted standards for high blood glucose. Terms such as “a touch of diabetes,” “borderline diabetes” or “sugar’s a little high” are unnecessary, confusing and unacceptable. There should be no question on the part of the patient or the treating professional whether or not a person has diabetes. Persons with diabetes should also know what type of diabetes they have.

### **Principle 2: On-Going Care**

*People with diabetes should always receive high-quality care on an ongoing basis to ensure that they are taking good care of their diabetes, and to make changes to their treatment plan when needed to achieve control of the disease.*

The person with diabetes should have on-going care in a supportive, positive environment, without barriers to obtaining care. The health care team must include a provider responsible for on-going care and skilled in its delivery with access to other types of providers that often include physicians with various specialties, a diabetes educator, a nutritionist, and other health care professionals when appropriate. Particular groups including people of certain ethnic backgrounds, youths, pregnant women, and the elderly each have very special needs that should be addressed. People with diabetes also need support from their family, friends, and co-workers. Financial resources must be available for necessary education, durable equipment, supplies and medicine. Discrimination against employment, licensing, and obtaining insurance must be overcome.

### **Principle 3: Diabetes Education**

*People with diabetes and their family members have the right to accurate information and education needed for diabetes self-care.*

Health care providers should be responsible for providing diabetes education addressing the medical and emotional needs of the individual patient. Education enables the person with diabetes to participate more actively in his or her treatment and prevention of complications. Diabetes education is a continuous process. It should begin with the essential elements of self-care and include instruction on the prescribed medical regimen. Over time, the instruction should become a dialogue defining and addressing the needs of the individual and his or her family.

People with diabetes should have the opportunity to acquire the knowledge and skills to enable and empower them to provide self-care for their disease. It is also important to enlist the patient, family members, and others who support the patient in the health care team so as to achieve a greater measure of self-care and quality of life for people with diabetes.

#### **Principle 4: Treating Hyperglycemia**

*Blood glucose levels should be kept as near to normal levels as is safely possible. The target range should be based on an overall assessment of the person's health.*

A primary goal of diabetes treatment is the control of hyperglycemia by a variety of methods. It is well known that hyperglycemia, over many years, causes long-term complications of diabetes. The risk of eye disease (retinopathy), kidney disease (nephropathy) and nerve damage (neuropathy) is strongly linked with too high blood glucose levels. Evidence is growing that the higher risk of hardening of the arteries (heart attacks, circulatory problems, and stroke) in people with diabetes also can be lessened by controlling hyperglycemia.

The treatment methods necessary to control hyperglycemia vary from person to person. In type 1 diabetes, insulin is always required, in combination with a well-defined treatment plan. In some people with type 2 diabetes, a healthy diet and exercise achieves diabetes control, but most will require pills and/or insulin in addition to diet and exercise to control their diabetes. The exact methods of treatment—diet, exercise, oral antidiabetic agents and/or insulin—should be tailored to the individual's needs. People with diabetes should participate in the decision making process, with options and goals clearly stated.

#### **Principle 5: Self-Monitoring of Blood Glucose Control and Hemoglobin A1c (HbA1c)**

*Blood glucose levels and Hemoglobin A1c values should be measured on a routine basis using current, reliable methods.*

The absence of symptoms of high blood glucose is an unreliable guide to judge glucose levels since they do not occur until blood glucose reaches dangerous levels. Diabetes is often called a “silent disease” because it can cause serious complications without always having serious symptoms. Routine self-monitoring of blood glucose is the most successful approach in self-management of diabetes because it provides a picture of the immediate blood glucose level. Individual circumstances will define how often self-monitoring is used, the specific approach, and the methods of recording or reporting results. People with diabetes must have access to the tools necessary for self-management, usually including blood glucose meters and strips.

Hemoglobin A1c (also called glycohemoglobin, glycosylated hemoglobin or glycated hemoglobin) is a test that indicates the average blood glucose over

the previous 8-12 weeks. Since most long-term complications of diabetes are related to hemoglobin A1c, its measurement should be a regular part of assessing diabetes care. Hemoglobin A1c monitoring is essential to assess long-term blood glucose control. People with diabetes should know their own hemoglobin A1c, and whether they are reaching their target goal.

**Principle 6: Preventing and Diagnosing Long-term Diabetes Problems**

*Excellent diabetes care can greatly lower the chances of developing long-term diabetes problems.*

The control of blood glucose is one important way to prevent complications. Other important risk factors include smoking, high blood pressure and levels of blood fats above normal (especially high total cholesterol and LDL-cholesterol, or low HDL-cholesterol levels). Routine measurement and management of these risk factors are part of good diabetes care.

Another important way to prevent long-term complications of diabetes is to practice healthy self-care behaviors. A healthy diet and regular use of prescribed medications are basic behaviors needed for diabetes self-care. Regular exercise, foot care, and routine visits to health care providers are examples of other needed behaviors.

**Principle 7: Screening For and Treating Long-term Diabetes Problems**

*People with diabetes should have regular exams to help find and treat long-term diabetes problems. All long-term diabetes problems have effective treatments.*

Routine screening for long-term complications can help detect problems at a time when they can be successfully treated and managed. The physical examination and/or laboratory tests can be used to identify early complications. Examples include the dilated eye examination by a competent professional for detection of retinal (eye) complications, the physical examination for detection of nerve damage, and a measurement of protein in the urine to detect kidney disease.

The progression of long-term complications of diabetes can usually be prevented or delayed if they are found and treated at an early stage. The progression of diabetic kidney disease, for example, can be slowed or prevented by controlling high blood pressure and high blood glucose. Severe eye disease can be successfully managed by laser therapy. Circulatory complications in the legs, heart, or brain may be improved by treatments that may or may not need surgery. These examples show the importance of treating long-term complications at any stage of diabetes.

# ***For People with Diabetes***

## ***7 Principles for***

### ***Controlling Your Diabetes for Life***

**This brochure will help you learn about 7 principles for good diabetes care.**

These principles are the steps you can take to control your diabetes. Every person who has diabetes has different needs. Talk to your doctor about a treatment plan that is best for you. When you have diabetes, controlling it can help you live a long and active life.

#### **It Is Important to Control Diabetes**

Taking good care of diabetes can lower the chances of getting:

- Eye disease that can lead to a loss of vision or even blindness
- Kidney failure
- Heart disease
- Nerve damage that may cause a loss of feeling or pain in the hands, feet, legs, or other parts of the body
- Stroke

As you read this brochure, look for things that start with a ☒ to help you learn how to control your diabetes.

**Take this brochure with you when you go to your doctor.**

#### **Principle 1: Find Out What Type of Diabetes You Have**

If you have diabetes, you should know what type you have. If you do not know, ask your doctor whether you have:

- **Type 1 diabetes.** People who have this type of diabetes need to take insulin every day. This type of diabetes used to be called juvenile diabetes.
- **Type 2 diabetes.** This type of diabetes can often be controlled by the food you eat and regular physical activity. Some people may also need to take diabetes pills or insulin. This type of diabetes used to be called adult onset diabetes.



Your doctor may use some terms that are no longer used to describe diabetes. If your doctor uses any of these, ask whether you have type 1 or type 2 diabetes.

Terms that are no longer used include:

- “a touch of diabetes”
- “borderline diabetes”
- “sugar’s a little high”

### **Many People Who Have Diabetes Do Not Know It**

Finding and treating diabetes early can prevent health problems later on. Some people are at higher risk for diabetes than others. Risk factors for diabetes include:

- Being older than 45
- Being overweight
- Having a close family member, like a parent, brother, or sister, who has, or had, diabetes
- Having had diabetes when you were pregnant
- Being African American, Hispanic/Latino, Asian American and Pacific Islander, or Native American

- ☒ **Find out from your doctor what type of diabetes you have.**
- ☒ **If your doctor describes your diabetes with a term that is no longer used, ask the doctor whether you have type 1 or type 2 diabetes.**
- ☒ **If you know someone who has any of the risk factors for diabetes, tell them to ask their doctor about getting tested for diabetes.**

### **Principle 2: Get Regular Care for Your Diabetes**

Mark the statements that you think are true. People with diabetes should:

- ☐ Always receive high-quality care.
- ☐ Work with health care providers to make changes to their treatment plan when needed.
- ☐ See a doctor, diabetes educator, or a nutritionist on a regular basis.
- ☐ Be able to get their health care needs taken care of regardless of their race, age, disability, or ability to pay.
- ☐ Get support from family, friends, and co-workers.
- ☐ Be able to get insurance and a license.

- ☐ Be treated fairly at work.
- ☐ Be able to get Medicare to help pay for diabetes supplies if they are on Medicare.

All of the statements are true.

You have the right to get the best health care to help you control your diabetes.

- ☒ **Ask your doctor or nurse how often you need to see them for a check-up.**
- ☒ **Write down the date and time for your next visit: \_\_\_\_\_**
- ☒ **Ask your doctor or clinic staff to help you find resources if you have problems paying for food, medicines, and medical supplies.**
- ☒ **Make a list of things you want to talk about at your next visit to the doctor or clinic.**

☐ \_\_\_\_\_

☐ \_\_\_\_\_

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### **Principle 3: Learn How to Control Your Diabetes**

You and your family have the right to get correct information from your doctor and other health care providers to help you learn how to control your diabetes.

#### **How Active Are You in Controlling Your Diabetes?**

Look at the list below. Check all of the boxes that describe you.

- ☐ I ask my doctor for accurate information about my diabetes.
- ☐ I have talked with my doctor about other people, like a nutritionist and diabetes educator, who can help me learn to control my diabetes.
- ☐ I ask the diabetes educator and nutritionist about diet and other ways to control my diabetes.
- ☐ I talk to my doctor regularly about my special needs and controlling my diabetes.

If you checked everything on the list above, you are taking an active role in learning how to control your diabetes. If you did not check everything on the list, ask your doctor about things that you should do to learn more about how to control your diabetes. Learning how to control your diabetes can help you stay healthy.

- ☒ **Ask your doctor about where to go to learn more about diabetes and how to control it.**

## **Principle 4: Treat High Blood Sugar**

The number one goal of diabetes treatment is to control high blood sugar levels. There are many ways that this can be done. These include:

- Eating a healthy diet
  - Getting regular physical activity
  - Taking medicine for your diabetes if your doctor tells you to
  - Testing your blood sugar
- ☒ **Talk to your doctor about the best ways to control your high blood sugar.**
  - ☒ **Get involved in making a treatment plan and other decisions about your diabetes care.**

## **Principle 5: Monitor Your Blood Sugar Level**

### **Testing Your Own Blood Sugar**

You may need to test your own blood sugar on a regular basis to help you control your diabetes.

- ☒ **Talk with your health care provider about:**
  - What type of test to use
  - How to do the test the right way
  - How often to test
  - How often to report the test results
  - Getting the supplies you need to do the tests. If you get Medicare, it can help pay for your diabetes supplies.

## Hemoglobin A1c Testing

A hemoglobin A1c test is done by your doctor. It measures how well your blood sugar has been controlled over the last 2 to 3 months. This test is very important because it tells how well you are taking care of your diabetes.

To learn more about this and other blood sugar tests, you can call 1-800-438-5383. Ask for the brochure called **Know Your Blood Sugar Numbers: The ABCs of Testing for Blood Sugar Control**.

- ☒ **Ask your doctor or nurse educator what your last hemoglobin A1c test result was. Write it below.**

My last hemoglobin A1c test result was: \_\_\_\_\_

Date of test: \_\_\_\_\_

- ☒ **Ask your doctor or nurse educator what your target hemoglobin A1c test result should be. Write it below.**

My target hemoglobin A1c is: \_\_\_\_\_

## Principle 6: Prevent and Diagnose Long-Term Diabetes Problems

People with diabetes must control their blood sugar levels to prevent problems such as eye disease, kidney disease, nerve damage, heart disease, and stroke. Here are some tests that you should get on a regular basis. These include:

- ☒ **Blood pressure checks**

Date tested \_\_\_\_\_

Results \_\_\_\_\_

- ☒ **Cholesterol tests**

Date tested \_\_\_\_\_

Results \_\_\_\_\_

☒ **Other blood fat tests (ask your doctor what tests you should have)**

Type of test \_\_\_\_\_

Date tested \_\_\_\_\_

Results \_\_\_\_\_

Remember, to help control and manage your diabetes, you should also do the following:

- Eat a healthy diet
- Take medicine if your doctor tells you to
- Get regular physical activity
- Get regular foot and eye exams
- Work with your health care providers to do these things

**Principle 7: Get Checked for Long-Term Problems and Treat Them**

To check for problems that diabetes can cause, you should see your doctor or other health care providers on a regular basis. Doing this can prevent problems or find them early, when they can be treated and managed well.

☒ **Ask your doctor or other health care providers about how often you should have your:**

- Feet checked
- Eyes tested
- Kidneys tested

☒ **Ask your doctor or other health care providers about other tests you may also need to have:**

\_\_\_\_\_

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**To take good care of your diabetes for life, be sure to follow these 7 principles:**

1. Find Out What Type of Diabetes You Have.
2. Get Regular Care for Your Diabetes.
3. Learn How to Control Your Diabetes.
4. Treat High Blood Sugar.
5. Monitor Your Blood Sugar Level.
6. Prevent and Diagnose Long-Term Diabetes Problems.
7. Get Checked for Long-Term Problems and Treat Them.

People who have diabetes and keep their blood sugar levels under control can expect to live a long and active life.

**To learn more about how to control your diabetes, visit the National Diabetes Education Program Web site at <http://ndep.nih.gov> or call 1-800-438-5383.**

Here are some other places that you can contact to get more information about how to control your diabetes.

**American Association of Diabetes Educators**

1-800-338-DMED

Web site: <http://www.aadenet.org>

**American Diabetes Association**

1-800-DIABETES

1-800-232-3472

Web site: <http://www.diabetes.org>

**American Dietetic Association**

1-800-877-1600

1-800-366-1655 (consumer nutrition hotline in English and Spanish)

Web site: <http://www.eatright.org>

**Centers for Disease Control and Prevention**

Division of Diabetes Translation

(877) 232-3422

Web site: <http://www.cdc.gov/diabetes>

**Juvenile Diabetes Foundation International**

1-800-JDF-CURE

1-800-223-1138

Web site: <http://www.jdfcure.org>

**National Institute of Diabetes and Digestive and Kidney Diseases**

National Diabetes Information Clearinghouse

(301) 654-3327

Web site: <http://www.niddk.nih.gov>



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